ESTIMATES

BRUHAT BENGALURU MAHANAGARA PALIKE
YELAHANKA ZONE

NAME OF WORK : Improvements to Roads and drais in Vinayaka Layout 2nd Stage and surrounding areas in ward no -07, Byatarayanapura

Sl. No	Description of Item	Unit	No.	Length	Width	Depth	Quantity	Est Cost Rate	100.00 Lakhs Amount
	KSRRB300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(I.NO 19.1,Page no 143 SR 2018-19)								
	B.S Slab Drain								
	Vinayaka Layout 2nd Stage								
	4th main 2nd Cross Road LHS	Cum	1	120.00	0.60	0.20	14.40		
	4th main 2nd Cross Road RHS	Cum	1	116.95	0.60	0.20	14.03		
	5th main Road LHS	Cum	1	31.00	0.60	0.20	3.72		
	5th main Road RHS	Cum	1	31.00	0.60	0.20	3.72		
	5th Main 1st Cross Road LHS	Cum	1	83.00	0.60	0.20	9.96		
	5th Main 1st Cross Road RHS	Cum	1	83.00	0.60	0.20	9.96		
	4th Cross Road LHS	Cum	1	110.00	0.60	0.20	13.20		
	4th Cross Road RHS	Cum	1	110.00	0.60	0.20	13.20		
	3rd Cross Road LHS	Cum	1	106.00	0.60	0.20	12.72		
	3rd Cross Road RHS	Cum	1	106.00	0.60	0.20	12.72		
	2nd Cross Road LHS	Cum	1	95.00	0.60	0.20	11.40		
	2nd Cross Road RHS	Cum	1	95.00	0.60	0.20	11.40		
	1st Cross Road LHS	Cum	1	90.00	0.60	0.20	10.80		
	1st Cross Road RHS	Cum	1	90.00	0.60	0.20	10.80		
1	Cross Roads from 1st to 4th Cross LHS	Cum	1	75.00	0.60	0.20	9.00		
	Cross Roads from 1st to 4th Cross RHS	Cum	1	75.00	0.60	0.20	9.00		
	CC Drain								
	Chinnappa Layout 1st Cross LHS	Cum	1	48.00	0.75	0.75	27.00		
	Chinnappa Layout 1st Cross RHS	Cum	1	48.00	0.75	0.75	27.00		
	Chinnappa Layout 2nd Cross LHS	Cum	1	60.00	0.75	0.75	33.75		
	Chinnappa Layout 2nd Cross RHS	Cum	1	60.00	0.75	0.75	33.75		
	Culverts		7	6.50	1.00	0.90	40.95		
						Total Qty	**332.48**	**215.28**	**71577.00**
	Basic Rate	**130.00**							
	Area Weightage @ 6%	**7.80**							
	Loading and Unloading, Lead 8Km (57+2*1.28*8)	**77.48**							
	Total	**215.28**							
2	KSRB 4-12: Providing and laying Plain cement concrete 1:3:6 mix with OPC 220kgs with crushed stone aggregate 40 mm and down size graded granite metal coarse aggregates @0.892Cum and fine aggregates @ 0.465Cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.No-13,I No-4.2 of PWD BCSR 2018-19)								
	BS Slab Drain								
	Vinayaka Layout 2nd Stage								
	4th main 2nd Cross Road LHS	Cum	1	120.00	0.60	0.15	10.80		
	4th main 2nd Cross Road RHS	Cum	1	116.95	0.60	0.15	10.53		
	5th main Road LHS	Cum	1	31.00	0.60	0.15	2.79		
	5th main Road RHS	Cum	1	31.00	0.60	0.15	2.79		
	5th Main 1st Cross Road LHS	Cum	1	83.00	0.60	0.15	7.47		
	5th Main 1st Cross Road RHS	Cum	1	83.00	0.60	0.15	7.47		
	4th Cross Road LHS	Cum	1	110.00	0.60	0.15	9.90		
	4th Cross Road RHS	Cum	1	110.00	0.60	0.15	9.90		
	3rd Cross Road LHS	Cum	1	106.00	0.60	0.15	9.54		
	3rd Cross Road RHS	Cum	1	106.00	0.60	0.15	9.54		
	2nd Cross Road LHS	Cum	1	95.00	0.60	0.15	8.55		
	2nd Cross Road RHS	Cum	1	95.00	0.60	0.15	8.55		

CONSULTANCY CONSTRUCTION AMC

	1st Cross Road LHS	Cum	1	90.00	0.60	0.15	8.10		
	1st Cross Road RHS	Cum	1	90.00	0.60	0.15	8.10		
	Cross Roads from 1st to 4th Cross LHS	Cum	1	75.00	0.60	0.15	6.75		
	Cross Roads from 1st to 4th Cross RHS	Cum	1	75.00	0.60	0.15	6.75		
	CC Drain								
	Chinnappa Layout 1st Cross LHS	Cum	1	48.00	0.75	0.15	5.40		
	Chinnappa Layout 1st Cross RHS	Cum	1	48.00	0.75	0.15	5.40		
	Chinnappa Layout 2nd Cross LHS	Cum	1	60.00	0.75	0.15	6.75		
	Chinnappa Layout 2nd Cross RHS	Cum	1	60.00	0.75	0.15	6.75		
	Culverts	Cum	7	6.50	0.90	0.15	6.14		
						Total Qty	**157.97**	**5989.25**	**946110.00**
	Basic Rate	**5194.00**							
	Issue Rates as on 02-11-2021: 4.4*103.69	**456.24**							
	Area Weightage @ 6%	**339.01**							
	Total	**5989.25**							
3	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain at 60Kg/Cum	MT	53.46	60.00	3207.60		3.21		
	For Culvert at 80kg / Cum	MT	12.97	80.00	1037.40		1.04		
						Total Qty	**4.25**	**90596.08**	**384580.00**
	Basic Rate (Issue Rates as on 02-11-2021)	**85468.00**							
	Area Weightage @ 6%	**5128.08**							
	Total	**90596.08**							
4	Providing Granite slabs of selected quality roughly dressed and fixedin cement mortor (1:6) including fixing, curing etc.,complete 7.5 cms thick (Item No 5.31.1, P no 27, KPWD SR 2018-19)								
	For L Type Drain at (.75+.6=1.35)								
	Vinayaka Layout 2nd Stage								
	4th main 2nd Cross Road LHS	Sqm	1	120.00	1.35		162.00		
	4th main 2nd Cross Road RHS	Sqm	1	116.95	1.35		157.88		
	5th main Road LHS	Sqm	1	31.00	1.35		41.85		
	5th main Road RHS	Sqm	1	31.00	1.35		41.85		
	5th Main 1st Cross Road LHS	Sqm	1	83.00	1.35		112.05		
	5th Main 1st Cross Road RHS	Sqm	1	83.00	1.35		112.05		
	4th Cross Road LHS	Sqm	1	110.00	1.35		148.50		
	4th Cross Road RHS	Sqm	1	110.00	1.35		148.50		
	3rd Cross Road LHS	Sqm	1	106.00	1.35		143.10		
	3rd Cross Road RHS	Sqm	1	106.00	1.35		143.10		
	2nd Cross Road LHS	Sqm	1	95.00	1.35		128.25		
	2nd Cross Road RHS	Sqm	1	95.00	1.35		128.25		
	1st Cross Road LHS	Sqm	1	90.00	1.35		121.50		
	1st Cross Road RHS	Sqm	1	90.00	1.35		121.50		
	Cross Roads from 1st to 4th Cross LHS	Sqm	1	75.00	1.35		101.25		
	Cross Roads from 1st to 4th Cross RHS	Sqm	1	75.00	1.35		101.25		
						Total Qty	**1912.88**	**742.00**	**1419359.00**
	Basic Rate	**700.00**							
	Area Weightage @ 6%	**42.00**							
	Total	**742.00**							
5	Providing Granite slabs of selected quality roughly dressed and fixedin cement mortor (1:6) including fixing, curing etc.,complete 10 cms thick (Item No 5.31.12, P no 27, KPWD SR 2018-19)								

SHRIYA CONSTRUCTION AND CONSULTANCY

	For Coverig Slabs								
	Vinayaka Layout 2nd Stage								
	4th main 2nd Cross Road LHS	Sqm	1	120.00	0.90		108.00		
	4th main 2nd Cross Road RHS	Sqm	1	116.95	0.90		105.26		
	5th main Road LHS	Sqm	1	31.00	0.90		27.90		
	5th main Road RHS	Sqm	1	31.00	0.90		27.90		
	5th Main 1st Cross Road LHS	Sqm	1	83.00	0.90		74.70		
	5th Main 1st Cross Road RHS	Sqm	1	83.00	0.90		74.70		
	4th Cross Road LHS	Sqm	1	110.00	0.90		99.00		
	4th Cross Road RHS	Sqm	1	110.00	0.90		99.00		
	3rd Cross Road LHS	Sqm	1	106.00	0.90		95.40		
	3rd Cross Road RHS	Sqm	1	106.00	0.90		95.40		
	2nd Cross Road LHS	Sqm	1	95.00	0.90		85.50		
	2nd Cross Road RHS	Sqm	1	95.00	0.90		85.50		
	1st Cross Road LHS	Sqm	1	90.00	0.90		81.00		
	1st Cross Road RHS	Sqm	1	90.00	0.90		81.00		
	Cross Roads from 1st to 4th Cross LHS	Sqm	1	75.00	0.90		67.50		
	Cross Roads from 1st to 4th Cross RHS	Sqm	1	75.00	0.90		67.50		
						Total Qty	1275.26	966.72	1232815.00
	Basic Rate	912.00							
	Area Weightage @ 6%	54.72							
	Total	966.72							
6	Providing one line dressing to Granite stone slabs/granite stone masonry as per specificatons (Item No KBS 5.1.13,)								
	For Coverig Slabs								
	Vinayaka Layout 2nd Stage								
	4th main 2nd Cross Road LHS	Sqm	1	120.00	0.90		108.00		
	4th main 2nd Cross Road RHS	Sqm	1	116.95	0.90		105.26		
	5th main Road LHS	Sqm	1	31.00	0.90		27.90		
	5th main Road RHS	Sqm	1	31.00	0.90		27.90		
	5th Main 1st Cross Road LHS	Sqm	1	83.00	0.90		74.70		
	5th Main 1st Cross Road RHS	Sqm	1	83.00	0.90		74.70		
	4th Cross Road LHS	Sqm	1	110.00	0.90		99.00		
	4th Cross Road RHS	Sqm	1	110.00	0.90		99.00		
	3rd Cross Road LHS	Sqm	1	106.00	0.90		95.40		
	3rd Cross Road RHS	Sqm	1	106.00	0.90		95.40		
	2nd Cross Road LHS	Sqm	1	95.00	0.90		85.50		
	2nd Cross Road RHS	Sqm	1	95.00	0.90		85.50		
	1st Cross Road LHS	Sqm	1	90.00	0.90		81.00		
	1st Cross Road RHS	Sqm	1	90.00	0.90		81.00		
	Cross Roads from 1st to 4th Cross LHS	Sqm	1	75.00	0.90		67.50		
	Cross Roads from 1st to 4th Cross RHS	Sqm	1	75.00	0.90		67.50		
						Total Qty	1275.26	950.82	1212538.00
	Basic Rate	897.00							
	Area Weightage @ 6%	53.82							
	Total	950.82							
7	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69Cum and fine aggregate at 0.43Cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	Raft								
	CC Drain Raft								
	Chinnappa Layout 1st Cross LHS	Cum	1	48.00	0.75	0.15	5.40		
	Chinnappa Layout 1st Cross RHS	Cum	1	48.00	0.75	0.15	5.40		
	Chinnappa Layout 2nd Cross LHS	Cum	1	60.00	0.75	0.15	6.75		
	Chinnappa Layout 2nd Cross RHS	Cum	1	60.00	0.75	0.15	6.75		
	CC Drain Side Walls	Cum							

SHRIYA CONSTRUCTION AND CONSULTANCY

	Chinnappa Layout 1st Cross LHS	Cum	2	48.00	0.15	0.45	6.48		
	Chinnappa Layout 1st Cross RHS	Cum	2	48.00	0.15	0.45	6.48		
	Chinnappa Layout 2nd Cross LHS	Cum	2	60.00	0.15	0.45	8.10		
	Chinnappa Layout 2nd Cross RHS	Cum	2	60.00	0.15	0.45	8.10		
	Culverts Raft	Cum							
	Culverts	Cum	7	6.50	0.90	0.15	6.14		
	Culverts Side Walls								
	Culverts	Cum	14	6.50	0.15	0.50	6.83		
						Total Qty	**66.43**	**7729.67**	**513463.00**
	Basic Rate	**6670.00**							
	Issue Rates as on 02-11-2021: 6*103.69	**622.14**							
	Area Weightage @ 6%	**437.53**							
	Total	**7729.67**							
8	Providing and Fixing Pre cast covering Slab 100mm thick made out of CC, jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	CC Drain								
	CC Drain Raft								
	Chinnappa Layout 1st Cross LHS	Sqm	80	0.60	0.75		36.00		
	Chinnappa Layout 1st Cross RHS	Sqm	80	0.60	0.75		36.00		
	Chinnappa Layout 2nd Cross LHS	Sqm	100	0.60	0.75		45.00		
	Chinnappa Layout 2nd Cross RHS	Sqm	100	0.60	0.75		45.00		

SHRIYA CONSTRUCTION AND CONSULTANCY

							Total Qty	162.00	2337.00	378594.00
	Data Rate	2337.00							
9	Supply and fixing Precast reinforced concrete slab 250cm thick including cost of reinforcement as per design and drawing, material cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveynce charges, labour charges inclusive of cost of all materials.									
	Culverts									
	Culverts	Sqm	75	0.60	1.00		45.00			
						Total Qty	45.00	5418.00	243810.00	
	Data Rate	5418.00								
	Road Works									
10	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading (I No 19.14,P No-143) (8 km lead = 2*1.28X5)									
	Road									
	3rd Main Road VeerannaPalya									
	Road Cut Portion	Cum	1	502.00	1.95	0.24	234.94			
						Total Qty	234.94	63.94	15022.00	
	Basic Rate	41.00								
	Area Weightage @ 6%	2.46								
	8 Km lead= (2*1.28*8)	20.48								
	Total	63.94								
11	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147)									
	Road									
	3rd Main Road VeerannaPalya									
	Road Cut Portion	Sqm	1	502.00	1.95		978.90			
						Total Qty	978.90	6.36	6226.00	
	Basic Rate	6.00								
	Area Weightage @ 6%	0.36								
	Total	6.36								
12	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)									
	Road									
	3rd Main Road VeerannaPalya									
	Road Cut Portion	Cum	1	502.00	1.95	0.15	146.84			
						Total Qty	146.84	2001.28	293858.00	
	Basic Rate	1888.00								
	Area Weightage @ 6%	113.28								
	Total	2001.28								
13	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete with all lead and lift as per the direction of engineer-in-charge									
	3rd Main Road VeerannaPalya									
	Road	Sqm	1	502.00	5.35		2685.70			
						Total Qty	2685.70	5.30	14234.00	
	Basic Rate	5.00								
	Area Weightage @ 6%	0.30								
	Total	5.30								

SHRIYA CONSTRUCTION AND CONSULTANCY

14	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / Sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	Road								
	3rd Main Road VeerannaPalya								
	Road Cut Portion	Sqm	1	502.00	1.95		978.90		
						Total Qty	978.90	33.92	33204.00
	Basic Rate (Issue Rates as on 02-11-2021)	32.00							
	Area Weightage @ 6%	1.92							
	Total	33.92							
15	KSRRB M500- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.160 It.No.21.17.6)								
	Road								
	3rd Main Road VeerannaPalya								
	Road Cut Portion	Cum	1	502.00	1.95	0.05	48.95		
						Total Qty	48.95	8545.72	418270.00
	Basic Rate (Issue Rates as on 02-11-2021)	8062.00							
	Area Weightage @ 6%	483.72							
	Total	8545.72							
16	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 Sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	Road								
	3rd Main Road VeerannaPalya								
	Road	Sqm	1	502.00	7.30		3664.60		
						Total Qty	3664.60	12.72	46614.00
	Basic Rate (Issue Rates as on 02-11-2021)	12.00							
	Area Weightage @ 6%	0.72							
	Total	12.72							
17	Providing and laying bituminous concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 5.4 % VG-30 Bitumen (P.No-162 I No-21.22.6)								
	Road overlay								
	3rd Main Road VeerannaPalya								
	Road	Cum	1	502.00	7.30	0.04	146.58		
						Total Qty	146.58	10001.10	1466001.00
	Basic Rate (Issue Rates as on 02-11-2021	9435.00							
	Area Weightage @ 6%	566.10							
	Total	10001.10							

SHRIYA CONSTRUCTION AND CONSULTANCY

18	KSRRB M800-13.Road Marking with Hot A[illegible]ic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Pro[illegible]of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads a[illegible]area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Road								
	3rd Main Road VeerannaPalya								
	Road	Sqm	2.50	502.00	0.10		125.50		
						Total Qty	125.50	454.74	57070.00
	Basic Rate	429.00							
	Area Weightage @ 6%	25.74							
	Total	454.74							
								Sub-Total for CSR 2018-19	8753345.00
								Applicable GST Charges 12% on CSR 2018-19	1050401.00
								Detailed Project Reports (DPR) Charges 1%	98037.00
								Project Management and Quality Control (PMC) Charges 1%	98037.00
								Miscellaneous and unforeseen charges	180.00
								Grand Total Amount Rs.	10000000.00
	(Rupees One Crore Only)								

CERTIFICATE

1) The site has been inspected and the work is found to be necessary.
2) The rates adopted are as per PW,P IWTD SR of 2018-19 and Approved Data Rate of Bangalore Circle.
3) The provisions were made in this estimate are necessary and adequate.
4) The area comes under the Bruhat Bengaluru Mahanagara Palike Limits.
5) This work is not repeated in any other Programs or Grants

Assistant Engineer
Ward No.07
B.B.M.P

Assistant Executive Engineer
Sub-Division
B.B.M.P

Executive Engineer
Byararayanapura - Division
B.B.M.P

SHRIYA CONSTRUCTION AND CONSULTANCY

Administrative Approval
Accorded For Rs 100.00 lakhs only
Head of A/C.....
CER NO :..45..... Dt:22.10.2021
TA
CE (YNK)

Technical Sanction
Accorded Rs. 100.00 lakhs
Head of A/C. P-3075
CER NO :..56..... Dt:22/10/2021